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| **NAME** | **Prof. (Dr.) Ravi Kant Singh** |  |
| **DESIGNATION** | Professor | |
| **EMAIL ID** | rksingh1@amity.edu | |
| **CONTACT NUMBER** | 9718515328, 9810249758 | |
| **RESEARCH INTERESTS** | Environmental Biotechnology & Bioprocess Engineering | |

**EDUCATIONAL QUALIFICATIONS:**

| Name of College / University | Degree | Year |
|---|---|---|
| Uttar Pradesh Technical University, Lucknow (Workplace: Indian Institute of Technology, Roorkee) | Ph.D. in Biotechnology | 2008 |
| Institute of Engineering & Technology, Lucknow (Affiliated with University of Lucknow, Lucknow) | M.Tech. in Biotechnology | 2002 |
| University of Lucknow, Lucknow | M.Sc. in Chemistry (Splz. Organic Chemistry) | 1999 |
| University of Lucknow, Lucknow | B.Sc. (PCM) | 1997 |

**Title of Ph.D. thesis:** Studies on Adsorption and Biodegradation for the Removal of p- Cresol from Industrial Wastewater

**EXPERIENCE (in chronological order): Total 23 Years of Research & Teaching**

| **Designation** | **Type of post held (teaching/ research)** | **Name of the Institute** | **Year (From – To)** |
|---|---|---|---|
| Professor | Teaching/ Research | Amity Institute of Biotechnology, Amity University, Noida | 04.08.2022 to till date |
| Professor & Dean/ Director | Teaching/ Research | Amity Institute of Biotechnology, Amity University, Raipur | 13.08.2018 to 03.08.2022 |
| Professor & Dean Academics | Teaching/ Research | NIET, Greater Noida | 01.12.2017 to 09.08.2018 |
| Professor & Dean Academics | Teaching/ Research | RITEE, Raipur | 14.01.2017 to 27.11.2017 |
| Professor & Head (BT & CH) | Teaching/ Research | NIET, Greater Noida | 16.03.2015 to 13.01.2017 |
| Associate Professor & Coordinator (IQAC) | Teaching/ Research | IMSEC, Ghaziabad | 01.08.2011 to 14.03.2015 |
| Assistant Professor-III | Teaching/ Research | IMSEC, Ghaziabad | 19.08.2008 to 31.07.2011 |
| Assistant Professor-III | Teaching/ Research | MIET, Meerut | 01.09.2007 to 18.08.2008 |
| Assistant Professor | Teaching/ Research | MIET, Meerut | 26.08.2002 to 31.08.2007 |

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| **No. of Ph.D. students supervised** | 04 (Awarded) |
| | 04 (on going) |
| **No. of Post-Doc** | NIL |
| **No. of M.Tech. Students supervised:** | 26 |
| **No. of B.Tech. Students supervised:** | 72 |

**PUBLICATIONS**
***(54)***

**PUBLICATIONS IN LAST FIVE YEARS**

1. Latika Jaiswal, Sachinandan De, **Ravi Kant Singh**, Rubina Kumari Baithalu, Molecular characterization and protein structure prediction of heat shock transcriptional factors in goat (*Capra hircus*) and sheep (*Ovis aries*), Animal Biotechnology, 30 (3), 2019, 1-9.
2. Latika Jaiswal, Sachinandan De, **Ravi Kant Singh**, Seasonal variation in expression pattern of *heat shock factor* genes in *Ovis aries* and *Capra hircus*, Indian Journal of Animal Sciences, 89 (9), 2019, 951-954.
3. Meenu Chopra, **Ravi Kant Singh**, Sachinandan De, Genome Based Phylogeny and Virulence Factor Analysis of Mastitis Causing Escherichia coli Isolated from Indian Cattle, The Indian Journal of Animal Sciences, 90 (12), 2020, 1577-1583.
4. Meenu Chopra, **Ravi Kant Singh**, Sachinandan De, Complete genome sequence and comparative analysis of multi-antibiotic resistance plasmids in carbapenem-resistant Escherichia coli from bovine mastitis, Indian Journal of Biotechnology, 20 (2), 2021, 13-23
5. Sakshi Chaudhary, **Ravi Kant Singh**, Pradeep Kumar, Genome-wide Identification, characterization, and primer designing of simple sequence repeats across *Leguminoseae* family, 3 Biotech, 13 (8), 2023, 286.
6. Aparna Kaushik, Ravi Kant Singh, Pankaj Kumar Tyagi, Green Synthesized Nanoparticle Based Drug Delivery: Recent Trends and Future Prospects, Precision Nanomedicine, 6(3), 1109-31
7. Aditya Kate, Ekkita Seth, Ananya Singh, Chandrashekhar Mahadeo Chakole, Meenakshi Kanwar Chauhan, **Ravi Kant Singh**, Shrirang Maddalwar, Mohit Mishra, Artificial Intelligence for Computer-Aided Drug Discovery, Drug Research, 73 (5), 303.
8. **Ravi Kant Singh**, Santosh Kumar Mishra, V. Balasubramanian, Priya Ranjan Kumar, Development of biologically based activated carbon for advanced water and wastewater treatment process, Bioremediation of Pollutants, June 2020, 215-225.
9. Pradeep Kumar, Madhu Kamle, Pawan K. Maurya, **Ravi Kant Singh**, Beneficial uses and applications of plant growth promoting Rhizobacteria in sustainable agriculture, Microbiology for Sustainable Agriculture, Soil Health & Environmental Protection, Apple Academic Press, USA, February 2019, 81-104.

10. Balasubramanian V, Arunima Sur, Kush Kumar Nayak, **Ravi Kant Singh**, Plant Root Exudates as Determinant of Rhizomicrobiome, Rhizosphere Microbes, Soil and Plant Functions, Vol. 23, Springer Nature, January 2021, 105-126.
11. Keshawanand Tripathi, Narendra Kumar, Meenakshi Singh, **Ravi Kant Singh**, Fungal Siderophore: Biosynthesis, Transport, Regulation, and Potential Applications, Rhizosphere Microbes, Soil and Plant Functions, Vol. 23, Springer Nature, January 2021, 387-408.
12. Madhu Kamle, Rituraj Borah, Himanshree Borah, Amit K. Jaiswal, **Ravi Kant Singh**, Pradeep Kumar, Systemic acquired resistance (SAR) & induced systemic resistance (ISR): Role & mechanism of action against phytopathogens, Fungal Biotechnology and Bioengineering, Springer, June 2020, 457-470.
13. Santosh Kumar Mishra, **Ravi Kant Singh**, Priya Ranjan Kumar, Transgenic plants in phytoremediation of organic pollutants, Bioremediation of Pollutants, June 2020, 39-56.
14. Mohit Mishra, **Ravi Kant Singh**, Sushma Chauhan, Priyanka Gupta, Secretome of Microbiota in Extreme Conditions, Microbial Versatility in Varied Environments, April 2020, 85-99.
15. Santosh Kumar Mishra, Priya Ranjan Kumar, **Ravi Kant Singh**, Ajay Kumar Singh, Agro-Industrial Residues as Solid Substrate for α-Amylase Production Using Solid State Fermentation by Filamentous Fungi: A Review, Biosc. Biotech. Res. Comm., 13 (2), June 2020, 550-555.
16. Kundan Kumar, **Ravi Kant Singh**, Pankaj Kumar Tyagi, Dilip Gore, Assessment of Toxicity and Safety Profiles of Nanoparticles, Letters in Appl. Nano Biosci, 10 (1), 2021, 1877-1888.
17. Kundan Kumar, **Ravi Kant Singh**, Pankaj Kumar Tyagi, Varaprasad Kolla, Dilip Gore, *Tinosporacordifolia* reduced copper oxide nanoparticles synthesis, characterization, and its antibacterial investigation, European Chemical Bulletin, 12 (5), 2023, 1242-1254.
18. Abhinav Shrivastava, **Ravi Kant Singh**, Pankaj Kumar Tyagi, Dilip Gore, Synthesis of Zinc Oxide, Titanium Dioxide and Magnesium Dioxide Nanoparticles and Their Prospective in Pharmaceutical & Biotechnological, 2 (1), 2021, 11-20.

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| **PATENTS** ***(05)*** | 1. Plant Protection Coating Paint Composition Using Fly Ash and Preparation Method Thereof' (Application No-202311032457)<br>2. Solar pyrolysis device design for preparation of biochar from biomass (Application No.-TEMP/E-1/45376/2023-DEL)<br>3. Bioreactor based power generation using plant biomass method and design Thereof (Application No.- TEMP/E-1/49002/2023-DEL)<br>4. Concentrating Solar Radiation Based Device for Milk Tea Preparation (Application No.- Temp/E1/69104/2023- Del)<br>5. Integrated High Efficiency Biological Particulate Removal System for Controlled Environment Enclosures (Application No.- Temp/E1/79104/2023- Del) |
| **RESEARCH PROJECTS**<br>Completed: ***(04)***<br>Ongoing: ***(NIL.)*** | 1. Completed a research project on Development of Technology Packages and Simulation model for prediction of plant performance based on evaluation of plants already established in field sponsored by MNES, Govt. of India.<br>2. Completed a research project on development of nano-based biosensor for wastewater monitoring & treatment funded by MSME, Govt. of India<br>3. Completed an infrastructure development project MODROB funded by AICTE.<br>4. Completed the Establishment of Herbal Garden to conserve Germplasm of Endemic and Endangered Traditional Medicinal Plants of Chhattisgarh state.<br>5. |
| **AWARDS & HONOURS/ DISTINCTIONS** | 1. Lifetime achievement Award<br>2. Best Academician Award<br>3. Best Administrative Award<br>4. JRF & SRF |
| **MEMBERSHIP** with Professional/ Academic bodies | 1. Life Member, The Biotech. Research Society, India<br>2. Life Member, Association of Biotechnology and Pharmacy, India<br>3. Life Member, Association of Microbiologist of India, India<br>4. Life Member, The Indian Society of Human Genetics, India<br>5. Life Member, Bioinformatics and Drug Discovery Society |